

## *BOURRERIA RUBRA* (BORAGINACEAE), A NEW SPECIES FROM COASTAL JALISCO, MEXICO

*Bourreria rubra*, a new species from coastal Jalisco, Mexico, is described and illustrated. The new species is distinguished by its shrubby habit, long slender pedicels, few-flowered inflorescences, short-petiolate oblanceolate leaves, and showy red flowers. It does not appear to be closely related to any other Mexican species.

Intensive collecting in the Estacion de Biologia Chamela (U.N.A.M.), Jalisco, and vicinity, and critical revision of these collections for a florula of the Station (Lott, in prep.) have resulted in the discovery of several novelties. Among these is a striking new red-flowered species of *Bourreria*.

***Bourreria rubra*** E. J. Lott & J. S. Miller, sp. nov.

TYPE: Mexico. Jalisco: Mpio. La Huerta, Estacion de Biologia Chamela, ca. m 1,200 de la Vereda Tejon, en Selva Baja Caducifolia achaparrada, con dominante de *Plumeria rubra*, *Caesalpinia coriaria*, *Jatropha standleyi*. 22 Sept. 1981 (fl), Lott 507 (holotype, MEXU; isotypes, CAS, GH, MO, US). Figure 1.

Frutex usque ad 3 m altus. Folia brevipetiolata, oblanceolata, strigillosa. Inflorescentia cymosa laxa, pedicellis ad 1.5–3.8 cm longis. Flores 1–7(–20); calyx campanulatus, sparse strigillosus, 5-lobatus, lobis acutis vel acuminatis, adaxialiter dense strigillosis; corolla rubra, late infundibuliformis, 1.4–2 cm longa; stamina exserta, filamentis in duabus tertiis partibus inferioribus hirsutis, alibi glabratis. Fructus globosus.

Shrub to 3 m, base 3 cm diam. or more, the bark gray, the stems pale, with scattered ovate lenticels ca. 0.5 mm long, strigose to glabrate. Leaves petiolate, alternate, the internodes mostly 1–2 cm long, or the leaves crowded on short shoots; blade oblanceolate, 2–6.5 cm long, 0.8–2.5 cm wide, the apex obtuse to acute, minutely apiculate with acumen 0.4–0.5 mm long, recurved abaxially, the base obtuse to slightly oblique, the sides more or less unequal, the margin entire, revolute, the upper surface scabrous and pustulate, more or less strigillose, shiny olive green, the lower surface sparsely strigillose and paler dull green, the midvein sulcate above, prominent beneath, the 4–7 pairs of secondary veins much less prominent; petiole 1–2 mm long, broadly sulcate on the adaxial surface, strigillose. Inflorescence terminal or subterminal, laxly cy-

mose, sparsely strigose throughout; flowers 1–7 (–20), erect, bracts leaf-like, narrowly oblanceolate, 4–10 mm long, peduncle slender, mostly 0.3–1.5 cm long; pedicels slender, mostly 1.5–3.8 cm long, articulate at the base of the calyx, bracteoles linear to linear-lanceolate, 0.5–2 mm long, restricted to the lower one-fifth of the pedicel; calyx valvate, subglobose, acute in bud, 8–12 mm long at anthesis, short-stipitate, campanulate, with a few scattered strigillose hairs outside, the lobes 5, triangular, acute to acuminate, 3–4 mm long, 2–3 mm wide, subequal, thickened at the tips and densely white-strigillose within with hairs ca. 0.5 mm long; corolla red, broadly funnelform, 1.4–2 cm long, the tube 9 mm long, the lobes 5, rounded, 8–9 mm long, 4–7 mm wide, glandular-pubescent on the inner surface; stamens the same number as the corolla lobes, exserted, inserted on the corolla tube ca. 4 mm above the base, the filaments hirsute at and just above the point of insertion, with hairs ca. 0.6 mm long, the upper one-third glabrous, the free portion 6–9 mm long, the anthers oblong, 2–2.5 mm long, bithecous; ovary oblong, ca. 2 mm long, glabrous; disc annular; style ca. 11 mm long, bifid, the branches 3–5 mm long, stigmas capitate. Fruit bluish black, globose, ca. 8 mm diam., nutlets 4, ca. 6 mm long, ca. 4 mm wide, the outer surface rounded, deeply fluted with fine vertical ridges, the inner surface biconvex, dark reddish brown.

*Additional specimens examined.* MEXICO, JALISCO: Mpio. La Huerta, Estacion de Biologia Chamela, 11 Dec. 1983 (fr), Lott 2177 (CHAPA, F, IBUG, MEXU); 12 Dec. 1983 (fl), Miller 416 (MEXU, MO); 21 Feb. 1977 (fl) Solis Magallanes 523 (MEXU); 20 Feb. 1981 (fl), Solis Magallanes 2759 (F, MEXU); 2 Sept. 1981 (fl), Solis Magallanes 3103 (GH, MEXU, MO, NY); 4 Nov. 1982 (fl), Solis Magallanes 3928 (MEXU); Las Alamandas, centro turistico a 2.5 km al W de Quemaro, a 5 km al W de la carretera Puerto Vallarta-Barra de Navidad, 29 Oct. 1981 (fl, fr), Lott 683 (CHAPA, MEXU, MO); 1 Aug. 1983 (fl, fr), Lott et al. 1712 (CAS, ENCB, MEXU, MICH, MO, US).

*Distribution.* Thus far known only from the Estacion de Biologia Chamela and surrounding coastal area, the new species is apparently confined to tropical deciduous forest (Selva Baja Caducifolia) at 10–150 m elevation. Where exposed to constant strong coastal winds it forms part of a thick dwarf shrubby forest with *Bursera*



FIGURE 1. A, B. *Bourreria rubra* E. J. Lott & J. S. Miller. —A. Branch with inflorescence. —B. branchlet with fruits. Both from *Lott 683*.

*instabilis*, *B. excelsa*, *Euphorbia schlechtendalii*, *Caesalpinia platyloba*, and *Stenocereus* sp. Flowers are visited by Euglossine bees. Flowering and fruiting occur from August to February.

A genus in need of revision, *Bourreria* comprises nearly 50 species, all from the Neotropics (Airy Shaw, 1973). Perhaps 15 species occur in Mexico (Standley, 1924), but the genus is best represented in Cuba where there are probably close to 20 species. *Bourreria rubra* is unique in the genus in having red corollas. The majority of *Bourreria* species have either white- or cream-colored corollas although that of *B. quirosii* Standl. is pale yellow, and two species from Cuba, *B. moaensis* Britt. and *B. rostrata* (DC.) Johnst., are reported to have bluish corollas (Leon & Alain, 1957). *Bourreria rubra* bears a superficial resemblance to the white-flowered *B. spathulata* (Miers) Hemsl. of Guerrero but differs in having longer and more slender pedicels, larger flowers, and essentially eglandular filaments. It is unusual among Mexican species in its densely shrubby habit, which resembles more closely that of many of the Cuban species, to which it is perhaps more

closely allied than it is to any of the species known from Mexico or Central America.

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